

## **REMARKS**

Claims 1-2, 4-6, 8-9, 11, 13-14, 16-20, and 22-24, all the claims pending in the application, stand rejected on prior art grounds. Applicants respectfully traverse these rejections based on the following discussion.

### **I. The Prior Art Rejections**

Claims 1, 5-6, 8-9, 13, 17-19, and 23-24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Yamada (U.S. Patent No. 5,796,614), in view of Costanza (U.S. Patent No. 6,594,535). Claims 2, 14, and 20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Yamada, in view of Costanza, in further view of Kawashima, et al. (U.S. Patent No. 5,168,445), hereinafter referred to as Kawashima. Claims 4, 11, 16, and 22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Yamada, in view of Costanza, in further view of Horne (U.S. Patent No. 7,058,587). Applicants respectfully traverse these rejections based on the following discussion.

The claimed invention provides a method of forecasting component requirements for devices being manufactured, comprising performing a minimum profile technique that removes all ordering parameters including order minimums, order maximums, leadtimes, transit times, and order sizing. In the rejection, the Office Action argues that the equation 6 of Costanza “is a min-profile process”. However, Costanza does not teach a process that removes all ordering parameters. Instead, the asserted “min-profile process” of Costanza utilizes the “quantity” ordering parameter. Therefore, as explained in greater detail below, Applicants respectfully submit that the prior art of record does not teach or suggest the claimed invention.

Applicants traverse the rejections because the prior art of record fails to teach or suggest “performing a minimum profile technique that removes all ordering parameters including order minimums, order maximums, leadtimes, transit times, and order sizing”. Such features are defined in independent claims 1, 8, 13, and 19.

The Office Action argues that Costanza teaches a minimum profile technique. More specifically, “[t]he examiner notes that equation 6 is a min-profile process” (Office Action, p. 4, para. 1 (citing Costanza, col. 21, lines 17-19)). However, Applicants submit that the asserted “min-profile process” of Costanza (i.e., equation 6) is not a process that “removes all ordering parameters including order minimums, order maximums, leadtimes, transit times, and order sizing” (independent claims 1, 8, 13, and 19). Instead, the asserted “min-profile process” of Costanza utilizes the “quantity” ordering parameter.

More specifically, equation 6 of Costanza is utilized to determine “[t]he total amount of a material required to produce the amount of product ordered in a sales order” (Costanza, col. 21, lines 14-16). In order to determine this amount, equation 6 utilizes two parameters. The first parameter is the “order *quantity*” (Costanza, col. 21, line 19 (emphasis added)).

Therefore, equation 6 utilizes the ordering parameter “order quantity”; and as such, the asserted min-profile process of Costanza does not teach “remov[ing] all ordering parameters including order minimums, order maximums, leadtimes, transit times, and order sizing” (independent claims 1, 8, 13, and 19).

To the contrary, as described in paragraphs 0035 – 0036 of Applicants’ disclosure, to make the component forecast more easily understood in actual volumes, a “min-profile” technique is used to remove all ordering parameters, which tend to distort the actual needs with

order sizes, minimums, maximums, etc. MRP (Materials Requirement Planning) programs use many explode parameters, such as leadtime, transit time, order sizing, etc. Leadtimes and Transit times offset the demands for all components, thus making their demand earlier in time to compensate for the time it takes to build and transport parts. These offset days, at multiple levels, will vary depending on the supplier location and type of transportation used, thereby more accurately tracking true demand and impact from top schedule changes. In addition, order sizing parameters group the demand at all levels to provide an economical purchase quantity. A component's physical size as well as its dollar value will affect the lot size quantities. Typically, large or high dollar parts will be packaged in smaller order size quantities, as the inventory costs are greater. When making a parameter change, many other variables are affected in determining the calculated parts requirements.

Therefore, in one embodiment, the invention provides the min-profile feature to create the ability to play "what if" scenarios. The min-profile feature provides the ability to turn off all the optional parameters, and only utilize the minimal required parameters (min-profile) for the MRP explode. The min-profile process provides the users with a better understanding of the effects of machine build plan changes or parameter changes on components lower in the BOM (Bill of Material) structure. This is done by reviewing the existing machine build plan dates and quantities 200, reviewing the total requirements (exploded through the structure) of a particular part number 202, changing the machine build plan quantities or another parameter, and reviewing the critical part number which was previously calculated. This allows the net quantity change to be more clearly understood. This is particularly important, for parts that are constrained or have excess inventory.

Accordingly, Applicants submit that Costanza does not disclose a minimum profile technique that removes ordering parameters. Instead, the asserted min-profile process of Costanza utilizes the ordering parameter “order quantity”. Therefore, it is Applicants’ position that Costanza fails to teach or suggest the claimed feature of “performing a minimum profile technique that removes all ordering parameters including order minimums, order maximums, leadtimes, transit times, and order sizing” as defined by independent claims 1, 8, 13, and 19.

Therefore, it is Applicants’ position that the prior art of record does not teach or suggest many features defined by independent claims 1, 8, 13, and 19 and that such claims are patentable over the prior art of record. Further, it is Applicants’ position that dependent claims 2, 4-6, 9, 11, 14, 16-18, 20, and 22-24 are similarly patentable, not only because of their dependency from a patentable independent claims, but also because of the additional features of the invention they defined. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections.

## **II. Formal Matters and Conclusion**

In view of the foregoing, Applicants submit that claims 1-2, 4-6, 8-9, 11, 13-14, 16-20, and 22-24, all the claims presently pending in the application, are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary. Please charge any deficiencies and credit any overpayments to Attorney's Deposit Account Number 50-0510.

Respectfully submitted,

Dated: March 23, 2007

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